ABSTRACT.

Content-targeted ads are served with e-mail messages, such as HTML e-mail messages by (i) having the document publisher include a unique content identifier in the content, (ii) having a client device pass the unique content identifier to a content-relevant ad server in a content-relevant ad request, and (iii) having the content-relevant ad server use the unique contend identifier to identify previously registered content for purposes of determining content-relevant ads. In the content-relevant ad server, multiple ads may compete for desired ad attributes (e.g., relative position on a page) or features. An arbitration process may be used to chose and/or order the ads. By having the client device pass the unique content identifier to the content-relevant ad server when it needs the ads, ads can be chosen and generated all at the time the user reads (or more generally "opens") the e-mail document. This permits up-to-date ad information to be used when serving ads. User actions with respect to served ads may be tracked by (i) using an ad image to display ads in the document, and (ii) using an image map (included in the document originally served) to monitor user behavior with respect to an ad served in a document. All the information about the ad impression may be encoded in a unique identifier, which is returned, along with the ad image. The ad image and unique identifier may be provided to a client device. When a user selects an ad, this unique identifier may be returned to the ad server. A position of an image map clicked may also be returned to the ad server. The returned unique identifier and image position may be used to allow the ad server to determine which ad was selected. Thus, the unique identifier permits a selection to be matched with a previous ad serve.